U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: November 29, 1991

FROM: J. Daniel Harkay, OSC, USEPA Region II Removal Action Branch

TO:
K. Callahan, EPA
J. Marshall, EPA
J. Frisco, EPA
R. Salkie, EPA
G. Zachos, EPA
J. Siegel, EPA
L. Miller, NJDEP
D. Oster, NJDEP
E. Kearns, JC Div. of Egr.
R. Bassford, JCFD
T. Harrison, JCIA
ERD, Washington (E-Mail)
TAT

SUBJECT: Ideal Cooperage Site, Jersey City, Hudson County, New Jersey

POLREP NO.: Seven (7) and Final

I. BACKGROUND

Site No.:	6P
Delivery Order No.:	0102-02-016
Response Authority:	CERCLA
ERNS No.:	N/A
NPL Status:	Non-NPL
State Notification:	NJDEP notified
Action Memorandum:	Approved on September 13, 1990
Start Date:	December 27, 1990
Demobilization Date:	October 11, 1991
Completion Date:	November 29, 1991

II. SITE INFORMATION

Ideal Cooperage Inc. operated a steel drum reconditioning facility from 1952 to 1981. When the company filed for bankruptcy in 1981, several hundred drums were abandoned on an adjacent parcel of land which was used by the company for empty drum storage. The drums were reportedly empty, however, hazardous substances were identified in some of the drums.

The site, approximately 1.3 acres in size, is situated between industrial and residential sections of Jersey City. The elevated property is relatively flat, with almost its entire perimeter sloping downward toward the property line. Low brush and small trees cover the surface area of the site.

The site has been used in recent years as an illegal dump for trash, construction debris and abandoned cars, and as a play area for neighborhood children. Although various city agencies have attempted to keep the property secure and free of trash, dumping and trespassing have been continual problems. In April 1989, the City of Jersey City reconstructed the roadway (New York Avenue) adjacent to the site. As part of the construction project, a fence was installed around the site which has minimized illegal dumping.

III. RESPONSE INFORMATION

A. Planned Removal Actions

The removal action was divided into the following phases:

Site Preparation and Empty Drum Staging/Removal - Brush and small trees were cleared, non-hazardous scrap material was removed, and minor grading was performed. Crushed stone was also placed directly inside the front gate as part of the "clean zone". All empty drums were segregated from those containing material and shipped to an off-site drum recycler.

Drum Staging, Sampling, Field Screening, and Bulking - Drums containing hazardous materials were staged, sampled, and field-tested for hazardous characteristics. Compatible materials were then bulked into new or existing drums.

Composite Sampling, Analysis, and Off-Site Disposal - Composite samples of all waste streams were prepared and submitted for laboratory analysis. Off-site disposal of hazardous materials was arranged upon review of analytical results.

Test Pit Excavation - Six test pits were excavated to a maximum depth of 12 feet. Surface and subsurface soil samples were collected and submitted for laboratory analysis.

B. Situation

1. Current Situation

The property had been the subject of numerous inspections and assessments by the EPA, NJDEP, the Hudson County Health Department and the Jersey City Fire Department since the late 1970s. Over six hundred abandoned drums were identified on site, of which approximately 10% contained liquid or solid material. Many empty drums were severely deteriorated and appeared to have been on the property for many years. Since the entire site consists of fill material, buried drums and/or

contaminated subsurface soil may have existed. A subsurface investigation conducted by a private consultant several years ago identified low levels of toluene, perchloroethylene, and petroleum hydrocarbons.

The site was referred by the NJDEPE to the EPA on February 3, 1989. Cleanup activities were stalled for over a year while the property owner and a potential buyer of the site were given opportunities to conduct a site cleanup themselves.

EPA and TAT performed several preliminary site investigations from February to November 1989 which identified drums containing unknown materials. Liquid and solid samples were collected from sealed drums for field testing and laboratory analysis. Acetic acid and surfactants were detected in several drums containing liquids, while a waxy organic substance was detected in another fourteen drums of solids. Laboratory analysis identified organic esters, phenol and phenol compounds, and polynuclear aromatic hydrocarbon compounds in a composite sample of the waxy solids. Based on the analytical results and site conditions, an EPA Removal Action was determined necessary to mitigate the public and environmental threats on the site.

On September 13, 1990, the Action Memorandum for the site was authorized by the Division Director. The total estimated cost for the removal action was $ 246,000, of which $ 180,000 was for mitigation contracting.

On December 27, 1990, EPA, TAT, and the ERCS contractor (S & D Environmental Services, Inc.) inspected the site for development of a work strategy. The months of January, February, March and April, 1991 were used to prepare for site removal activities.

Warning signs were placed along the site perimeter in late March. Personnel mobilized to the site on May 7, 1991 to begin cleanup activities. Site preparation, drum staging, and removal of non-hazardous scrap metal and empty drums were performed during the month of May. While ERCS staged drums containing material, TAT performed sampling and field-testing, and assigned waste classifications to the drums. Compatible materials were consolidated and repacked or overpacked. By the end of May, the estimate of on-site drums was increased to 1,800 drums, of which approximately 180 drums contained liquid or solid material.

On May 22nd, six (6) test pits were excavated to a depth of 12 feet at various locations throughout the site.

Soil samples were collected at various depths from each pit and submitted for laboratory analysis. Soil types and PID (HNu) readings were also recorded. Although the excavations revealed subsurface debris, no buried drums were discovered.

All site work was completed in early June. All hazardous materials in the approximately 180 drums were safely bulked into 84 drums. Section V of this report presents a breakdown of the drums according to waste stream.

Two (2) drums of flammable liquid were shipped off site in mid-June. TAT created eleven (11) composite samples to represent the final waste streams, and submitted the samples for disposal analysis. Final demobilization of equipment was also completed. All drums containing material were restaged near the front gate pending disposal.

2. Removal Actions to Date

The final trailer load of empty drums (183 drums) was shipped off site on June 20, 1991 (1,786 drums total). As the trailer was loaded, a full drum of organic solids was discovered underneath the drum pile. The drum, which was overpacked and staged near the front gate, will be disposed with other compatible materials.

Analytical results from the May 22nd test pit excavations were received in late June. All sample analyses revealed background levels of organic compounds and metals, except for the surface sample collected from test pit # 4. A mercury concentration of 517 ppm was detected in this sample. The sample was reanalyzed twice at the request of EPA to confirm the elevated mercury level. Reanalysis revealed concentrations of 107 and 113 ppm.

Analytical results for the 11 composite drum samples were received in late July. These results were reviewed and summarized by TAT for use in soliciting disposal bids.

On September 3rd, a representative from Petro-Chem Processing, Inc. of Detroit, Michigan, a kiln fuel blender and TSDF, met with TAT and ERCS on site to inspect the drums, collect a sample, and provide a disposal bid. Petro-Chem was subsequently selected as the most cost-effective disposal facility for all organic wastes on site.

All personnel returned to the site on September 18th to label the 65 drums of organic liquids and solids for

shipment to Petro-Chem. The drums were shipped off site the following day.

On October 11th, the remaining 18 drums of inert solids, neutral aqueous liquids, and acidic and alkaline liquids and solids were labeled and shipped off site to Cycle-Chem in Elizabeth, New Jersey. Cycle-Chem subsequently shipped the materials to approved treatment and disposal facilities. This shipment signified the completion of the removal action. A list of the facilities receiving waste from the site appears in Section V of this report.

Three surface soil samples were also collected from the test pit # 4 area on October 11th. The samples were submitted to a private laboratory to confirm the elevated level of mercury which was detected in the original surface sample collected during the test pit excavations. The analytical results were received on October 28th, and revealed mercury levels ranging from 28.5 to 292.0 ppm.

3. Enforcement

When Ideal Cooperage filed for bankruptcy in 1981, the site was sold to Marie Monck and Richard Pascale, the former principals of the company. These individuals have been identified as potentially responsible parties (PRPs). On November 2, 1990, an Administrative Consent Order was issued to the PRPs requesting a cleanup of the site. On December 4, 1990, the attorney for the PRPs informed the EPA Office of Regional Counsel that his clients were financially unable to conduct a cleanup.

C. Next Steps

The On-Scene Coordinator's Report will be completed by late December. A new site investigation may be initiated to determine the extent of mercury contamination in the test pit # 4 area. Refer to the Key Issues section of this report for more information.

D. Key Issues

All objectives set forth in the Action Memorandum were achieved through the removal action. Surficial hazardous materials were safely shipped off site for disposal, thereby eliminating the immediate threat to human health and the environment.

According to the analytical results obtained from the confirmatory soil sampling event, it is evident that mercury contamination exists in the test pit # 4 area. The OSC has requested a health consultation by ATSDR to determine if the mercury contamination identified in the surface soil poses a public health risk. Should the conditions at the site require remediation, additional sampling will be conducted to delineate the extent of contamination, and an Action Memorandum will be drafted to request funding for the cleanup.

IV. COST INFORMATION

	Amount Budgeted	Cost To Date
ERCS Contractor (w/ 20% contingency)	$ 180,000	$ 148,350
TAT (w/ 15% contingency)	$ 34,000**	$ 30,800
CLP Analytical Services	N/A	N/A
REAC	N/A	N/A
Regional Laboratory Services	N/A	N/A
IAGs	N/A	N/A
EPA Intramural (HQ, Regions, ERT)	$ 13,000	$ 7,000
Letter Contracts	N/A	N/A
Other Extramural Contingencies	$ 19,000	$ 0
TOTALS	$ 246,000	$ 186,150
Percent of Project Funds Remaining		24.0 %

**: $ 8,000 were transferred from "Other Extramural Contingencies" and added to the original $ 26,000 TAT budget.

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

V. DISPOSITION OF WASTES

WASTE STREAM	MEDIUM	QUANTITY	CONTAINMENT - MIGRATION CONTROL	OFF-SITE TREATMENT METHOD	DISPOSAL FACILITY
Empty Drums	Steel, Plastic	1,786 Drs.	None	Recycle	Cardinal Compliance, Baltimore, MD
Non-Haz Debris	Scrap Metal	1 x 30 CY Rolloff	None	Recycle	Naporano Iron and Metal, Newark, NJ
Organic Solids	Solids	59 Drs.	Bulked and/or Overpacked	Kiln Fuel Blending	Petro-Chem Processing, Detroit, MI
Inert Solids**	Solids	9 Drs.	Bulked and/or Overpacked	Stabilize and Landfill	Michigan Disposal, Belleville, MI
Acid Solids**	Solids	3 Drs.	Bulked and/or Overpacked	Stabilize and Landfill	Michigan Disposal, Belleville, MI
Alkaline Solids**	Solids	2 Drs.	Bulked and Repackaged	Stabilize and Landfill	Michigan Disposal, Belleville, MI
Organic Liquids	Liquids	6 Drs.	Bulked and/or Repackaged	Kiln Fuel Blending	Petro-Chem Processing, Detroit, MI
Flam'ble Liquids**	Liquids	2 Drs.	Bulked and Repackaged	Kiln Fuel Blending	Keystone Cement, Bath, PA
Aqueous Neutral Liquids**	Liquids	2 Drs.	Bulked and Repackaged	Incineration	Thermal Oxidation, Roebuck, SC
Aqueous Acid Liquids**	Liquids	1 Dr.	Bulked and Repackaged	Wastewater Treatment	Dupont Chambers Works, Deepwater, NJ
Aqueous Alkaline Liquids**	Liquids	1 Dr.	Bulked and Repackaged	Wastewater Treatment	Dupont Chambers Works, Deepwater, NJ

**: Disposed via Cycle-Chem, Elizabeth, New Jersey